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School of Medicine
Department of Microbiology, RD-85

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Dr. Joshua Lederberg
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Dear Dr. Lederberg:

I too am sorry we didn't meet during your recent visit, but I am happy to pass on my recollections regarding Freeman. To my surprise They are now 23 years old. Insofar as I can recall there were two thinkings that led Freeman to his discovery. Vic was in the Department of Public Health at the time which was physically adjacent to Microbiology. He was engaged in an effort to develop a phage typing scheme for C. diphtheriae having done some other work on the classification of this group. Somewhere along the way he decided that the phages he was using might be employed in testing a theory (whose I don't know) about the non-toxinogenic counterparts of toxin producing strains. The theory was that the non-toxigens actually produced toxin but failed to release it. Freeman reasoned that phaggelysis would release this toxin if indeed it were present. Thus he was led to test lysates of C4 x beta phage for toxin. How or why he proceeded to the next step, &.e. to test the survivors for toxingenicity and ultimately for lysogeny I don't know. Obviously it was this step that led to the breakthrough.

As a non-historic aside, I might add that Freeman talked about his results to a number of membeks of our department. He wanted to continue his work on phage typing, and was not interested in pursuing the possibilitles of a phage-host relationship further. He hoped to enlist a member of our department in that aspect of the work. To a fresh PhD looking for a way to leave the field of parasitology the problem he had seemed like a good one. When I looked up bacteriophage in text, not having heard of it during my training period, I found it was pumported to have DNA. Since I had been exposed to transformation of D. pneumoniae by DNA that concurrence was good enough for me and I took the problem on. Three months later Freeman, who was an MD, decided to leave the field and went off to a residency program in Psychiatry in Pittsburgh. I have seen him once or twice since then, but not I believe since 1959. He probably can be traced through a listing of Psychiatrists unless of course he had a second change of heart and went off into still another field.

it is an odd story and I have often specualited how things might have gone had Freeman stayed here and in the field. For me it was an obvious turning point in my interests. I remember clearly at the time Freeman came in that I was considering working on the problem of what determines colonly size....Please let me know if you have any questions.

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Neal Groman

Sincerely